

Serial No. 09/271,249

Docket No.: 614.1948

REMARKS

In accordance with the foregoing, claim 27, 28, 29, 30 and 31 have been amended to clarify salient features of the invention and without introduction of new matter. Approval and entry of the amended claims are respectfully requested.

ITEM 1: WITHDRAWAL OF FINALITY OF OFFICE ACTION OF MARCH 3, 2004

Withdrawal of the referenced Office Action is acknowledged and greatly appreciated.

ITEMS 2-8: EXAMINER'S RESPONSE TO ARGUMENTS**ITEM 4: GROUPING OF THE CLAIMS**

Applicants respectfully submit that the grouping of claims remains inappropriate, since based on the Examiner's distorted interpretations of the claims, as explained in Applicants' Responses in prior prosecution herein including at least the Responses filed August 3, 2004 to the Final Office Action of March 3, 2004 and filed February 2, 2004 to the Office Action mailed October 2, 2003 as well as the Supplemental Preliminary Amendment filed herein on September 2, 2003 and the RCE and Preliminary Amendment filed hereon on July 23, 2003 -- and yet earlier Responses, all of which are incorporated by reference herein.

The Examiner has merely substituted his own interpretation of claim terms, which are contrary to the usages of that terminology in the subject application and claims -- and even contrary to dictionary definitions of same, as fully explained in the Response filed February 4, 2004.

The current Action adds further to the Examiner's distortion of clear and well established terms of art, as now asserted in the conclusion at page 9:

Therefore comparing and verification is the same function.

Indeed, the Examiner goes to the extreme in asserting, further:

Examiner points out that all of the functional steps performed are used only for accomplishing one thing -- verification of the biometric information and thereby authenticating an individual. Verification is performed by comparing converted extracted feature or extracted converted feature with a previously obtained sample (extracted and converted). Therefore the process of verification recited in all of the independent claims 1, 19, 27 and 9, 22, 28 is the same and produces the same result regardless of the order of steps performed prior to verification. Therefore the prior art showing of all features MCE applies as well with claims reciting features MEC.

(Emphasis added).

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In paragraph 19.3, the Examiner offers up a similar, unsubstantiated and illogical contention:

For the purpose of comparing the two pieces of biometric information it is irrelevant whether (sic) these pieces are extracted converted portions of biometric information or converted biometric samples. From the technical point of view comparison is done by comparing certain bit values. Therefore the function step V' = V and consequently, claims 18 and 26 reciting steps MCV' can be grouped with claims 1, 19, and 27 reciting steps MCV. Registering previously obtained information recited in claims 18 and 26 is the same as storing previously obtained biometric sample as recited in claims 1, 19 and 27.

(Emphasis added).

The Examiner in essence is asserting that he can ignore the respective, differentiating limitations of the different pending claims and treat them as interchangeable and without distinction since they all are directed to a single final result of:

"comparing the two pieces of biometric information...by comparing certain bit values..."

which is contrary to common sense and standard rules of claim interpretation.

In essence, the Examiner contradicts his own contention in Item 4 of the present action that "the claims have been grouped according to their scope and subject matter."

ITEM 5: THE EXAMINER'S DISTORTION OF THE TEACHINGS OF STRAIT IN ITEM 5 OF THE ACTION

The Examiner asserts in Item 5:

Strait teaches recording (i.e. extracting) the original biometric information and convolving (i.e. converting) the biometric measurements (i.e. extracted feature) – see column 53, lines 50-55. Strait teaches verifying the converted biometric information by comparing the error correcting codewords produced from the convolved biometric measurements (i.e. converted extracted feature biometric information) – see column 2, lines 30-50 and FIG. 2, blocks from 54 to 92. Examiner maintains that one of ordinary skill in the art would have been motivated to verify the extracted feature converted biometric information by comparing it against the extracted feature converted biometric information previously obtained as taught in Strait for securing a cryptographic system based on biometric measurements (see Strait, column 2, lines 60-65).

(Emphasis added).

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In his above statement, the Examiner now equates "recording" with "extracting"— and offers no basis for that distortion of the meanings of the standard terms. The Examiner is respectfully requested to justify his equating the terms "recording" and "extracting" and under what authority he proceeds in doing so.

In fact, claim 1 recites both the function of "extracting feature information.." and further, a function of recording or registering, in relation to "extracted feature, converted biometric information...which was previously obtained and registered in advance...." (See also, e.g. claim 5, reciting that "the registered information is prestored in a recording medium..."). Hence the terms have clearly different meanings in the context of the claims and specification of the present invention.

Moreover, the present invention does not claim the function of "recording...the original biometric information" as the Examiner implies.

Further, the Examiner asserts in the above quotation from Item 5 of the Action that Strait teaches:

Convolving (i.e. converting) the biometric measurements (i.e. extracted feature) - - see col. 53, lines 50-55.

However, Col. 53, lines 50-55 makes no reference to any "extracted feature" and instead addresses "convolving each of the original biometric measurements with a different original error correcting codeword... to generate a set of reference values." The very language of the Strait reference cited by the Examiner, at col. 53, lines 50-55, does not contain the language attributed thereto by the Examiner. The Examiner is requested to clarify what he intends.

Even though Strait contains no teaching whatsoever of extracting features of biometric information, the Examiner asserts:

Strait teaches verifying the converted biometric information by comparing the error correcting code words produced from the convolved biometric measurements (i.e. converted extracted feature biometric information) – see col. 2, lines 30-50 and FIG. 2, blocks from 54-92)

(Emphasis added)

Column 2 of the reference on the other hand describes verification as follows:

To enroll an individual, a biometric measurement is taken and exclusive-ORed with a random codeword to produce a "reference value." To verify the individual later, a biometric measurement is taken and exclusive-ORed with the reference value to reproduce the original random codeword or its approximation. (col. 2, lines 35-42)

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Furthermore, the reference further teaches performing a "toggling process" by which the system recovers

"both the original biometric measurement taken and the random codeword generated during enrollment.... Such biometric measurement and/or the corrected codeword can then be used to verify if the individual is an authorized user. (col. 2, lines 44-52)

Thus, Strait does not employ extracted features of biometric information. Furthermore, Strait does not perform verification by employing "converted biometric information," much less "extracted feature, converted biometric information."

Item 5 incorrectly cites a motivation to combine Kanevsky and Strait as residing in Strait at col. 2, lines 60-65. To the contrary of the Examiner's contention, col. 2, lines 60-65 of Strait merely cites:

"A further advantage of the present invention is that a method and system are provided for securing a cryptographic system based on biometric measurements."

It is self-apparent that the statement in Strait is devoid of any demonstration of motivation and certainly altogether inadequate under MPEP 2143-2143.03.

ITEM 7: HEREIN, THE EXAMINER CONCEDES THE DEFICIENCY OF THE COMBINATION OF REFERENCES RELIED UPON

In Item 7, the Examiner concedes that Kanevsky "fails to teach verifying the converted and extracted feature by metric information by comparing it against the converted and extracted feature biometric information previously obtained. Examiner agrees..."

Whereas the Examiner continues Item 7 to state that Strait teaches these features, it has been shown hereinabove that Strait does not teach any extraction feature much less performing verification using converted biometric information, much less extracted feature converted biometric information.

Indeed, Strait introduces the security problems overcome by the invention by using the reconstructed or recovered original biometric information for verification, and thus suffers a deficiency which the present invention successfully has overcome.

ITEM 8: THE COMBINATION OF PRIDDY AND STRAIT RELIED UPON IN ITEMS 15 AND 16 OF THE ACTION AS WELL IS ADMITTED TO BE DEFICIENT

In Item 8, the Examiner concedes that "Priddy does not explicitly teach verifying the extracted feature converted by biometric information by comparing it against the extracted

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feature converted biometric information previously obtained –but then asserts: “This feature is taught by Strait...by comparing...(i.e. converted extracted feature biometric information....”
(Emphasis added)

As shown above, Strait does not contain the alleged teaching relied on by the Examiner to overcome the deficiency of Priddy and thus the rejection based on this combination of Item 8 as well fails to support the rejections.

CONCLUSION

The Examiner's groupings of the claims is incorrect, since claims having different constituent elements are placed in a common group and different claims having common constituent elements are placed in different groups—and the Examiner then rejects these incorrectly grouped claims on common grounds, which simply do not comply with the claim limitations.

The Examiner's rationale in defense of the groupings is based on an unsubstantiated and clearly erroneous contention that the claims have been “grouped according to their scope and subject matter”—which Applicants have demonstrated is indisputably incorrect.

The Examiner's response that the meanings of terms, crafted by the Examiner, are “well known in the art...” fails to comply with the standard set for same, that they be “capable of instant and unquestionable demonstration as being well-known.” (MPEP 2144.03) Applicants have supplied dictionary definitions which contradict the Examiner's unsubstantiated and unsupported meanings for the terms of Strait, which the Examiner has failed to address. Likewise, the Examiner has failed to address applicants' prior contentions as to proper groupings of the claims. These factors render the present action non-responsive, since failing to respond to Applicants' request, that the Examiner rectify these deficiencies.

It is respectfully submitted that the grounds of rejection are altogether defective and that the same should be withdrawn.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

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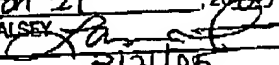
Respectfully submitted,

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